TABLE 1
MORPHOMETRIC DETAILS OF *HERREI* FROM INDIRA GANDHI WILDLIFE SANCTUARY

Characters	% SL
Head length	23.81 (22.52-25.37)
Body depth	17.34 (16.87-18.59)
Predorsal distance	50.25 (47.84-52.91)
Postdorsal distance	49.26 (44.64-52.08)
Prepelvic distance	51.81 (50.76-53.47)
Preanal distance	77.52 (72.46-80.00)
Length of Caudal fin	25.97 (25.0-29.41)
Length of Pectoral fin	20.79 (18.35-22.02)
Length of Pelvic fin	17.73 (16.61-18.65)
Length of Anal fin	13.89 (13.55-14.39)
Length of Body cavity	51.02 (49.50-52.35)
Length of caudal peduncle	13.23 (12.16-14.77)
	%HL
Eye diameter	19.01 (16.66-20.28)
Snout length	35.71 (33.33-36.63)
Inter-orbital width	28.65 (26.31-31.15)
Length of Pectoral fin	87.72 (81.30-91.74)
Snout-Eye diameter	53.19 (46.95-59.17)
Inter-Orbital width/Eye diameter	66.22 (58.48-74.07)
Body depth/Body width	87.72 (85.47-92.59)
Caudal fin/Head length	19.27 (16.26-21.69)
Distance between Pelvic to anal fin /Distance between anus to anal fin	19.27 (16.26-21.69)
Length of caudal peduncle/ Height of caudal peduncle	101.01 (90.09-111.11)
Distance between Pectoral to Ventral fin /Distance between Ventral to Anal fin	90.09 (83.33-101.01)

across back, broken up into secondary bands below lateral line; males with suborbital spine ..... *M. sijuensis*

— Lateral line incomplete; males without suborbital spine 9

9. Lateral line ending below dorsal fin or slightly in front of it, with a number of irregular V- or Y-shaped cross bands ..... *M. reticulofasciatus*

— Lateral line ending above end of anal fin base (7 or 8 saddle-shaped black bands on back; sides marked by varying number of bands broken up into narrow bands anteriorly .... *M. petrubanarescui*

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30. FISH FAUNA OF SOME STREAMS AND RIVERS IN THE WESTERN GHATS OF MAHARASHTRA

The documentation of fish fauna is essential, as major changes have occurred in the streams and rivers of the Western Ghats, in the Indian peninsula. Major rivers, such as the Godavari, Krishna and the Bheema, originate in the Maharashtra part of the Western Ghats. This documentation is part of a detailed programme on fish diversity in Western Ghats

TABLE 1
FISH SPECIES AND THEIR CONSERVATION STATUS AT DIFFERENT SITES IN SOME STREAMS AND RIVERS IN MAHARASHTRA

Species**	Sites* 1	2	3	4	5	6	7	8	9	10
I. **Order**: Elopiformes										
i **Family**: Megalopidae										
a. **Genus**: Megalops										
1. *Megalops cyprinoides* (NA)	-	x	-	-	-	-	-	-	-	-
II **Order**: Cypriniformes										
ii. **Family**: Cyprinidae										
b. **Genus**: *Labeo*										
2. *Labeo boggut* (NA)	-	x	-	-	-	-	-	-	-	-
3. *Labeo calbasu* (LRnt)	-	-	-	x	-	-	-	-	-	-
c. **Genus**: *Osteobrama*										
4. *Osteobrama cotio peninsularis* (NA)	x	-	-	-	-	-	-	-	-	-
d. **Genus**: *Puntius*										
5. *Puntius amphibius* (NA)	x	-	-	-	-	-	x	-	-	-
6. *Puntius bimaculatus* (NA)	-	-	-	-	-	x	-	-	-	-
7. *Puntius conchonius* (VU)	-	-	-	-	x	-	-	-	-	-
8. *Puntius sahyadriensis* (NA)	x	-	-	-	-	-	-	-	x	-
9. *Puntius sarana* (VU)	x	x	x	-	-	-	x	-	-	-
10. *Puntius sarana subnasutus* (NA)	x	-	-	-	-	-	-	-	-	-
11. *Puntius sophore* (LRnt)	-	-	-	-	-	-	-	x	-	-
12. *Puntius ticto* (LRnt)	x	-	-	-	x	-	x	-	-	-
e. **Genus**: *Hypselobarbus*										
13. *Hypselobarbus dubius* (EN)	-	x	-	-	-	-	-	-	-	-
f. **Genus**: *Tor*										
14. *Tor khudree* (VU)	-	-	-	-	x	-	-	-	-	x
g. **Genus**: *Chela*										
15. *Chela laubuca* (LRlc)	-	x	-	-	-	-	-	x	-	-
h. **Genus**: *Salmostoma*										
16. *Salmostoma boopis* (NA)	x	-	-	-	x	-	-	-	-	-
17. *Salmostoma clupeoides* (LRlc)	-	x	-	-	-	-	-	-	-	-
18. *Salmostoma novacula* (LRnt)	x	-	-	-	-	-	-	-	-	-
19. *Salmostoma sardinella* (NA)	x	-	-	-	-	-	-	-	-	-
i. **Genus**: *Barilius*										
20. *Barilius bendelisis* (LRnt)	x	-	-	-	-	-	-	-	-	-
j. **Genus**: *Danio*										
21. *Danio aequipinnatus* (LRnt)	x	-	x	x	x	x	-	x	x	-
k. **Genus**: *Parluciosoma*										
22. *Parluciosoma daniconius* (LRnt)	x	-	x	-	x	x	x	x	x	x
l. **Genus**: *Garra*										
23. *Garra mullya*	x	-	-	x	x	x	x	x	x	-
iii. **Family**: Parapsilorhynchidae										
m. **Genus**: *Parapsilorhynchus*										
24. *Parapsilorhyncus tentaculatus* (NA)	-	-	-	-	-	x	-	-	-	-
iv. **Family**: Cobitidae										
n. **Genus**: *Nemacheilus*										
25. *Nemacheilus denisoni denisoni* (NA)	x	x	-	x	-	-	x	-	x	-
26. *Nemacheilus evezardi* (NA)	-	-	-	-	x	-	-	-	-	-
27. *Nemacheilus ruppelli* (NA)	x	-	-	x	x	x	-	-	-	x
o. **Genus**: *Lepidocephalus*										
28. *Lepidocephalus thermalis* (NA)	-	-	-	-	x	-	-	-	-	

TABLE 1 (CONTD.)
FISH SPECIES AND THEIR CONSERVATION STATUS AT DIFFERENT SITES IN SOME STREAMS AND RIVERS IN MAHARASHTRA

Species**	Sites* 1	2	3	4	5	6	7	8	9	10
III **Order**: Siluriformes										
v. **Family**: Bagridae										
p. **Genus**: *Mystus*										
29. *Mystus bleekeri* (VU)	x	-	-	-	-	-	-	-	-	-
30. *Mystus malabaricus* (EN)	-	-	-	x	-	x	-	-	-	-
31. *Mystus vittatus* (VU)	-	-	-	x	-	-	-	-	-	-
vi. **Family**: Siluridae										
q. **Genus**: *Silurus*										
32. *Silurus wynaadensis* (CR)	x	-	-	-	-	-	-	-	-	-
r. **Genus**: *Wallago*										
33. *Wallago attu* (LRnt)	-	x	-	-	-	-	-	-	-	-
IV **Order**: Cyprinodontiformes										
vii. **Family**: Cichlidae										
s. **Genus**: *Aplocheilus*										
34. *Aplocheilus lineatus* (NA)	-	-	-	-	-	-	-	x	-	-
V **Order**: Perciformes										
viii. **Family**: Ambassidae										
t. **Genus**: *Chanda*										
35. *Chanda nama* (NA)										
ix. **Family**: Gobiidae										
u. **Genus**: *Glossogobius*										
36. *Glossogobius giuris* (LRnt)	-	-	-	x	x	x	-	-	-	-
v. **Genus**: *Stigmatogobius*										
37. *Stigmatogobius oligactis* (NA)	-	-	-	-	x	-	-	-	-	-
VI **Order**: Channiformes										
x. **Family**: Channidae										
w. **Genus**: *Channa*										
38. *Channa marulius* (LRnt)	x	x	-	-	-	-	-	-	-	-
VII **Order**: Mastacembeliformes										
xi. **Family**: Mastacembelidae										
x. **Genus**: *Mastacembelus*										
39. *Mastacembelus armatus* (NA)	-	-	-	x	x	-	-	-	-	-

x present; - absent
*1. Mondai 2. Khal river 3. Pej river 4. Vasishti river 5. Dhom reservoir 6. Phansad 7. Savitri 8.Gundalika 9. Vethaganga 10. Khandala Falls.
** LRnt – Lower Risk near threatened; LRlc – Lower Risk least concern; En – Endangered; VU – Vulnerable; CR – Critically Endangered; NA – Not Assessed (Sanjay Molur and Sally Walker, 1998)

the streams/rivers in Maharashtra, under the Western Ghats Biodiversity Project.

Earlier workers on the fish fauna of Maharashtra State include Fraser (1942), Hora and Misra (1942) and Suter (1944). In the Maharashtra State Gazette, there is a brief account of fishes in and around Pune (Kulkarni and Ranade 1974) including 167 species with their local (Marathi) and English names. Tilak and Tiwari (1976) studied the fishes from the Indrayani River. The fish fauna of Ujni wetland of Pune was studied by Yazdani and Singh (1990). Ghate *et al.* (1992) contributed on the fishes from Mula and Mutha rivers. Ghate and Pawar (1992) also documented the fish fauna from Neerar River, Pune.

1. Mondai stream: The Mondai stream starts from Mandhardevi hill ranges and joins Neerar river. Fishes were collected a kilometre from Shirrai in Satara district.
2. Khal river: Originates from Bhirra, in Raigad district, Maharashtra.
3. Pej river: Pej river flows in Khed on the northern side of Pune district. Sampling was done at Khed.
4. Vasishti river: Originates near Koynanagar on the western side of Chiplun area, and flows west in Ratnagiri district. Sampling was carried out near Chiplun.
5. Dhom river: Dhom reservoir is a man-made impoundment on the Dhom river.
6. Phansad river: Streams flow in the Phansad Wildlife Sanctuary in Murud taluka, Raigad district.
7. Savitri river: Originates from Mahabaleshwar and flows westwards. Sampling was done 15 km from Mahabaleshwar in Raigad district.
8. Gundalika river: Flows westward and into the sea at Roha. Sampling was done at Kolad.
9. Vethaganga river: A tributary of River Krishna, flows through Kolhapur district, Maharashtra.
10. Khandala Falls: Situated in Khopoli, it is a small drainage. Sampling was done near Kunega.

Fishes were collected using various mesh sizes of monofilament gill nets, drag nets and scoop nets in November and December 1996. The colour, markings and interesting characters were noted and specimens were preserved in 10% formalin. Day (1878), Jayaram (1991, 1999); Menon (1992, 1999); Talwar and Jhingran (1991) were referred to for identification.

Thirty-nine species belonging to 7 orders, 11 families and 24 genera from 10 localities were collected (Table 1). Most of these are widely distributed in Maharashtra and also in other parts of the Western Ghats. *Danio aequipinnatus*, *Garra mullya*, *Rasbora daniconius*, *Glossogobius giuris*, *Nemacheilus denisoni* are the commonest forms in Maharashtra State. *Puntius sahyadriensis*, *Chela laubuca*, *Osteobrama cotio peninsularis*, *Wallago attu*, *Silurus wynaadensis* and *Salmostoma novacula* were rare forms.

Salmostoma sardinella; *Silurus wynaadensis*, *Puntius bimaculatus*, *Puntius conchonius*, *Hypselobarbus dubius* were new records for Maharashtra and *Stigmatogobius oligactis* from Dhom reservoir was a new record for India (Arunachalam *et al.* 1999a, b; Arunachalam *et al.* 2000). The species was previously recorded from rivers of Java (Weber and Beaufort 1953).

Juveniles of *Tor khudree* were recorded in Dhom reservoir and large numbers were also recorded from Khandala falls. An interesting character in the juveniles of *Tor khudree* is the small black spot on the caudal peduncle region.

Industrialization and urbanization are the major threats to the fish communities and habitats in Maharashtra.

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31. CHECKLIST OF ANTS FROM NORTHWEST INDIA-II

In India, no comprehensive work is available on the Family Formicidae (Insecta: Hymenoptera) since Bingham (1903), which mostly covers taxa from southern India, Burma (=Myanmaar) and Sri Lanka. Since then, several taxonomic changes have been made. The present studies were carried out under a DST project on ants from northwest India and 8 subfamilies with 43 genera and 100 species have been recorded. Out of these, 13 new species have been reported. Two subfamilies, namely Dolichoderinae and Formicinae have been discussed.

SUBFAMILY: DOLICHODERINAE

1. ***Bothriomyrmex dalyi*** Forel 1895
   Collected from plains (250 to 300 m). Additional locality: Bengal.
2. ***Bothriomyrmex wroughtonii*** Forel 1895
   Plains, in soil nests (250 to 330 m).
3. ***Iridomyrmex glaber*** (Mayr 1862)
   Earlier reported from Western India, now collected from Chintpurni (700 m), Himachal Pradesh; Rohtak (220 m), Haryana.
4. ***Tapinoma indicum*** Forel 1895
   Nest in soil, mainly in plains; reported only